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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,332	09/11/2003	Alexander Pakhomov		3769

7590 05/10/2005  
Ilya Zborovsky  
6 Schoolhouse Way  
Dix Hills, NY 11746

EXAMINER
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LOBO, IAN J

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/659,332	<b>Applicant(s)</b> PAKHOMOV ET AL.	
	<b>Examiner</b> Ian J. Lobo	<b>Art Unit</b> 3662	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1.1

## DETAILED ACTION

### *Priority*

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994). The limitation in the instant claims "wherein said particles are treated with an electrically conductive substance" cannot be readily found in the parent application for which priority is being claimed.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-20 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al ('232) when taken in view of the article to Cash.

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Tanaka et al discloses a device for sensing acoustic vibrations. The device (Fig. 1) includes a body of particulate material (11) composed of a plurality of individual particles (11B) such as carbon dust, and means (12, 13, 17) for determining changes in electrical conductivity of the particulate material caused by the acoustic vibrations.

The difference between 17 and 23 and Tanaka et al is the claim includes the limitation that "the particles are treated with an electrically conductive substance".

Tanaka et al does not include such treatment.

The article to Cash discloses a system that enhances the conductivity of carbon dust by treating the carbon with specific molecular electrically conductive structures such as fullerenes or carbon nanotubes. Cash teaches that such nanotubes or fullerenes enhance the electrical conductivity of carbon dusts.

In view of the greater conductivity afforded, as taught by Cash, it would be obvious to one of ordinary skill in the art to modify Tanaka et al by treating the particulate material of Tanaka et al with an electrically conductive material, such as fullerene or nanotubes. Claims 17 and 23 are thus rejected.

Dependent claims 18-20 and 24 are further provided by the combination of the above prior art.

4. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al when taken in view of Heyler ('915).

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Tanaka et al discloses a device for sensing acoustic vibrations. The device (Figs. 1 and 3) includes a body of particulate material (11) composed of a plurality of individual particles (11B), and a non-conductive casing (14).

The difference between claim 21 and the structure of Tanaka et al is the lower part of the housing does not show a plurality of ventilating perforations, as claimed.

Heyler teaches a measuring unit where a plastic housing has ventilating perforations mounted on the bottom surface of the housing. Such ventilating perforations are particularly applicable for acoustic sensing devices. Thus, it would be obvious to one of ordinary skill in the art to modify Tanaka et al to include such ventilating perforations in the bottom section of the housing.

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 17-24 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian J. Lobo whose telephone number is (703) 306-4161. The examiner can normally be reached on Monday - Friday, 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (703) 306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ian J. Lobo  
Primary Examiner  
Art Unit 3662

ijl